

Remarks

Reconsideration of this Application is respectfully requested. Claims 1-20 are currently pending.

Drawing Objections

In a previous Office Action, dated July 2, 2003, the drawings were objected under 37 C.F.R. 1.84(p)(4) and (5) for various informalities. The Applicants submitted corrected drawing changes in an Office Action Response dated October 2, 2003. The Applicants respectfully request an indication that the corrected drawings have been approved and the objections withdrawn on the next correspondence from the Examiner.

Rejections Under 35 U.S.C. §102(b).

The Office Action rejected claims 1-2, 10-11, and 15-16 under 35 U.S.C. §102(b) as being allegedly anticipated by Zimsky U.S. Patent No. 2,725,012 ("Zimsky"). The Applicants respectfully traverse the rejection.

Claims 1-2 recite, *inter alia*, an electric motor that includes a preformed cylindrical composite can member removably affixed to one of the stator and rotor. Claims 10-11 recite, *inter alia*, an electric motor with a stator adapted to receive a preformed cylindrical composite can member removably affixed to the stator. Claims 15-16 recite, *inter alia*, an electric motor that includes a preformed cylindrical composite can member removably affixed to one of the stator and rotor.

The Office Action alleges that Zimsky discloses an electric motor that includes a preformed cylindrical composite can member removably affixed to one of the stator and rotor, as recited by claims 1-2 and 15-16 and the electric motor with a stator adapted to receive a preformed cylindrical can member removably affixed to the stator, as recited by claims 10-11. The Applicants respectfully disagree.

Zimsky discloses an electric motor that is completely sealed and may be submerged into water or other liquids (col. 4, lines 8-10). Zimsky discloses that the electric motor includes a stator that is segregated by a hollow cylinder, which is constructed from stainless steel (col. 4, lines 20-21). The hollow cylinder is sealed to a casing member by an O-ring (col. 4 lines 20-23). Zimsky also discloses that the rotor sits in an enclosure which isolates the rotor from the rest of the electric motor and is only attached to a shaft (col. 4, lines 35-38). As such, Zimsky discloses an electric motor with a stainless steel canning member which is not attached to either the stator or the rotor.

Zimsky fails to disclose the claimed invention. More particularly, Zimsky fails to disclose a composite canning member. Instead, Zimsky discloses a hollow cylinder made of stainless steel. Stainless steel is not a composite material. Moreover, Zimsky also fails to disclose that the canning member is removably affixed to one of a stator or rotor. Instead, the canning member isolates the stator from the remainder of the electric motor (Zimsky, col. 4, lines 19-20). Accordingly, Zimsky fails to disclose the invention as recited by claims 1-2, 10-11, and 15-16. Thus, it is respectfully submitted that claims 1-2, 10-11, and 15-16 are distinguished over the cited prior art.

Rejections Under 35 U.S.C. §103(a)

The Office Action rejected claims 3-5, 12-14 and 17-19 under 35 U.S.C. §103(a) as being allegedly unpatentable over Zimsky and in view of Junpei et al. U.S. Patent No. 3,577,024 (“Junpei”).

Claims 3-5 and 17-19 recite, *inter alia*, an electric motor that includes a preformed cylindrical composite can member removably affixed to one of the stator and rotor. Claims 12-14 recite, *inter alia*, an electric motor with a stator adapted to receive a preformed cylindrical composite can member removably affixed to the stator.

As described above, Zimsky fail to disclose, teach or suggest the claimed invention. Junpei also fails to rectify the deficiencies of Zimsky. More particularly, Junpei fails to suggest or teach a preformed cylindrical composite can member removably affixed to one of the stator and rotor.

Instead, Junpei suggests that a pair of oppositely directed helical grooves are formed on the peripheral surface of a rotor (Junpei, col. 1, lines 43-44). Junpei also suggests that the grooves create component of forces tending to push back cooling liquid (Junpei, col. 1, lines 47-48). However, Junpei fails to teach or suggest a can much less a preformed cylindrical can being a composite and the cylindrical can being removable. Accordingly, Junpei fails to teach or suggest each and every claim element of the invention as recited by claims 3-5, 12-14 and 17-19.

Since Zimsky and Junpei each fails to suggest the invention as recited by claims 3-5, 12-14 and 17-19, the combination of Zimsky and Junpei also fails to teach each and every claim element of the claimed invention. Accordingly, the invention as recited by claims 3-5, 12-14 and 17-19 is patentable over the cited prior art.

The Office Action rejected claims 6-7, 9, and 20 under 35 U.S.C. §103(a) as being allegedly unpatentable over Zimsky and in view of Smith et al. U.S. Patent No. 6,069,421 ("Smith"). The Applicants respectfully disagree.

Claims 6-7 and 20 recite, *inter alia*, an electric motor that includes a preformed cylindrical composite can member removably affixed to one of the stator and rotor. Claim 9 recites, *inter alia*, an electric motor with a stator adapted to receive a preformed cylindrical composite can member removably affixed to the stator.

The combination of Zimsky and Smith fail to teach or suggest each and every claim element of the invention as recited by claims 6-7, 9, and 20. More particularly, Smith and Yamamoto, each and in combination, fail to teach or suggest a preformed cylindrical composite can member removably affixed to one of the stator and rotor or an electric motor with a stator adapted to receive a preformed cylindrical composite can member removably affixed to the stator.

As described above, Zimsky fail to disclose, teach or suggest the claimed invention. Smith also fails to rectify the deficiencies of Zimsky. Rather, Smith teaches a can member permanently affixed to one of the stator and rotor. More particularly, Smith describes an electric motor having a composite encapsulated stator and rotor for submersion into liquid (Smith, col. 2, lines 55-56). Smith also suggests the encapsulated stator having an outer composite layer comprised of an inwardly directed radial flange and inner composite layer comprised of an outwardly directed radial flange (Smith, col. 2, lines 31-34). Moreover, Smith teaches that each layer of the flange being sealed by a chemical weld (Smith, col. 2, lines 34-35). Accordingly, the

flanges are permanently affixed to the stator. In other words, Smith teaches a composite can member that is permanently welded to the stator.

The invention, as recited by claims 6-7, 9, and 20, requires a removably affixed can member. Smith, on the other hand, teaches away from a removably affixed can member. As described above, Smith teaches chemically welding the layers of the flange. Welding permanently affixes the layers to the flange. Thus, Smith fails to teach or suggest a preformed cylindrical composite can member removably affixed to one of the stator and rotor, as recited by claims 6-7, 9, and 20.

Since Zimsky and Smith each fails to suggest the invention as recited by claims 6-7, 9, and 20, the combination of Zimsky and Smith also fails to teach each and every claim element of the claimed invention. Accordingly, the invention, as recited by claims 6-7, 9, and 20, is patentable over the cited prior art.

The Office Action rejected claim 8 under 35 U.S.C. §103(a) as being allegedly unpatentable over Zimsky and in view of Kunz et al. U.S. Patent No. 4,655,682 (“Kunz”). The Applicants respectfully disagree.

Claim 8 recites, *inter alia*, an electric motor that includes a preformed cylindrical composite can member removably affixed to one of the stator and rotor.

As described above, Zimsky fails to disclose, teach, or suggest the invention as recited by claim 8. Kunz fails to rectify this deficiency. More particularly, the combination of Zimsky and Kunz fails to teach each and every claim element of claim 8.

Instead, Kunz teaches a gas turbine engine with a stator assembly and a rotor assembly (Kunz, col. 3, lines 35-38). Kunz fails to disclose, teach or suggest a canning member for the gas

turbine engine much less a composite canning member. Moreover, Kunz teaches away from a canning member for a gas turbine engine. More particularly, a gas turbine engine is not designed to operate in liquids and does not require any type of device to prevent moisture penetration. Not surprisingly, Kunz fails to teach or suggest a can member much less a composite can member. Accordingly, Kunz fails to disclose, teach or suggest the invention as recited by claim 8.


Since Zimsky and Kunz each fails to suggest each and every claim element of claim 8, the combination of Zimsky and Kunz also fails to teach each and every claim element of the claimed invention. Accordingly, the invention as recited by claim 8 is patentable over the cited prior art.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,



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